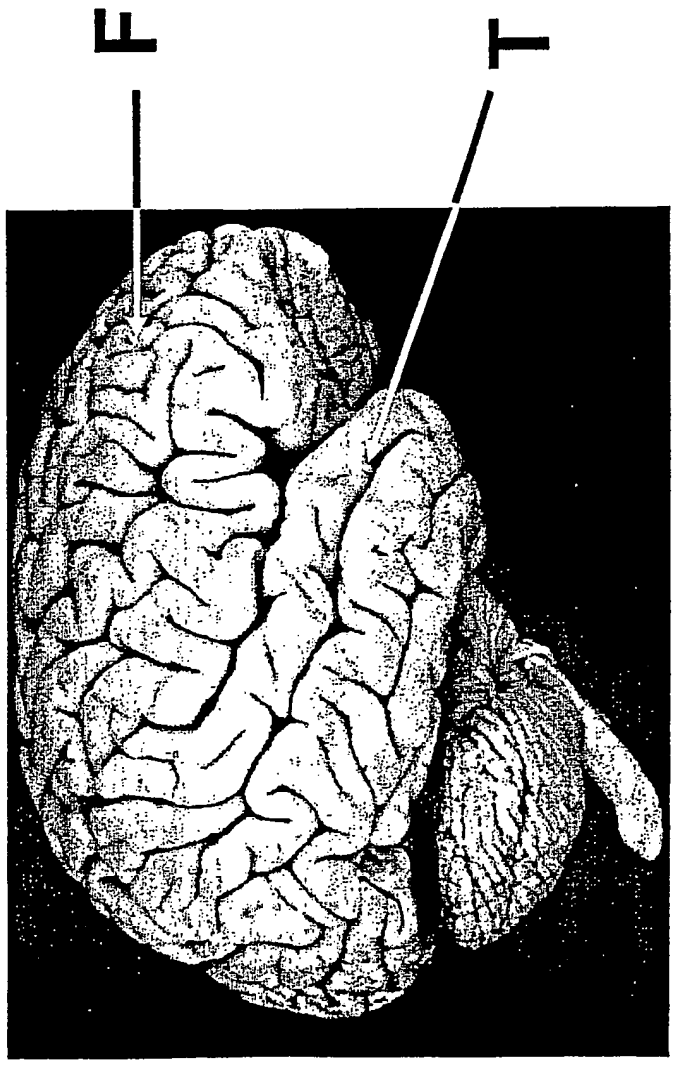

Fig. 1: Identification of genes involved in Alzheimer's Disease pathology

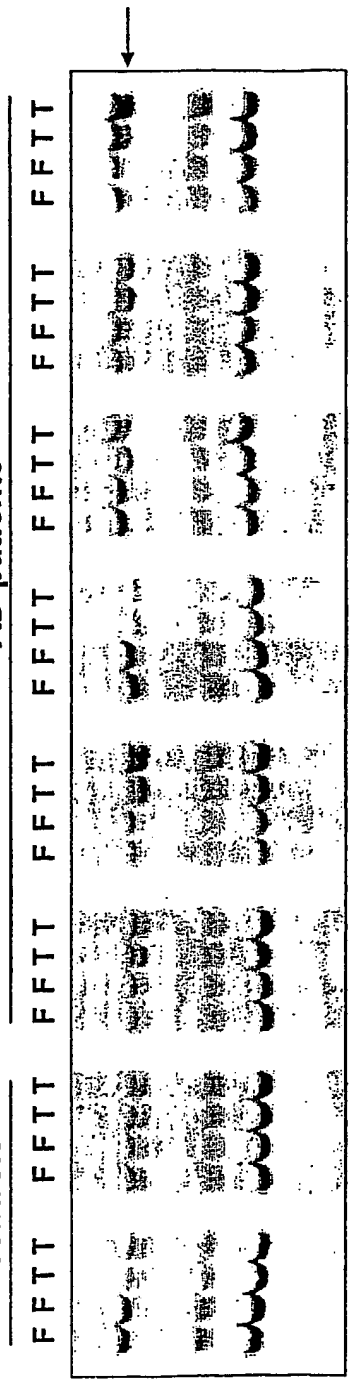

Fig. 2: Identification of differentially expression of the FOAP-13 gene by fluorescence differential display

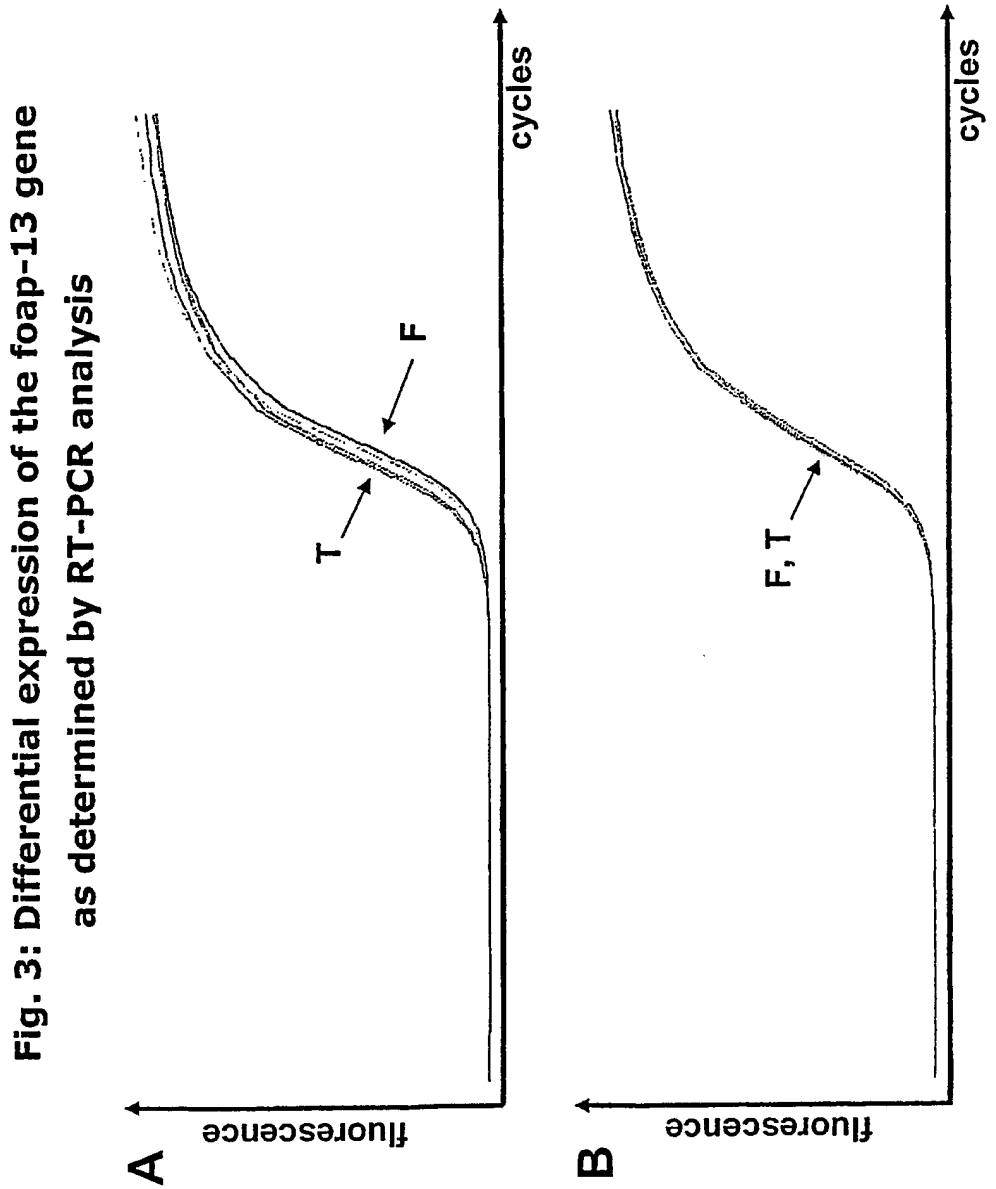

Fig. 3: Differential expression of the foap-13 gene as determined by RT-PCR analysis

Fig. 4: SEQ ID NO. 1

Length: 390 bp

```
  1  TGGTTCCTGG CTCTCCCTCA AGAGTGCAGC CTTGGCTAGA GAACTCACAG
 51  CTCTGGGAAA AAGAGGAGCA GACAGGGTTC CCTGGGCCCA GTCTCAGCCC
101  AGCCACTGAT GCTGGATGAC CTTGGCCTGA CCCTGGTCTG GTCTCAGAAT
151  CACTTTTCCC ATCTGTAAAA TTGAGATGAA TTTTGGTGTT GAAAGTTCTT
201  CCTGGAGCAG ATGTCCTAGA AGGTTTTAGG AATAGTGACA GAGTCAGGCC
251  ACCCCAAGGG CCATGGGAGC CAGCTGACCT GCTTGACCGA AGGATTTCTG
301  ACAGACTATC TTTGGGGATG TTTTCAAGAA GGGATATAAG TTATTTACTT
351  TGGGCATTTA AAAGAAAATT TCTCTCGGGA ATAATTTTAT
```

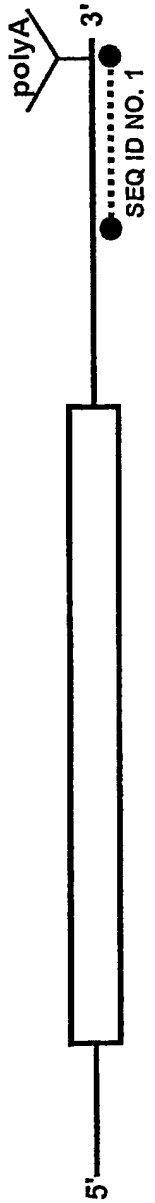

Fig. 5: Schematic alignment of SEQ ID NO. 1 with human FOAP-13 mRNA (GenBank accession number AB028927)

Fig. 6: Sequence alignment of SEQ ID NO.1 with nucleotides 2213-2602 of human FOAP-13 cDNA (GenBank accession number AB028927)

```
   1 TGGTTCCTGGCTCTCCCTCAAGAGTGCAGCCTTGGCTAGAGAACTCACAG 50
     ||  ||||||||||||||||||||||||||||||||||||||||||||||
2213 TGCTTCCTGGCTCTCCCTCAAGAGTGCAGCCTTGGCTAGAGAACTCACAG 2262

  51 CTCTGGGAAAAAGAGGAGCAGACAGGGTTCCCTGGGCCCAGTCTCAGCCC 100
     ||||||||||||||||||||||||||||||||||||||||||||||||||
2263 CTCTGGGAAAAAGAGGAGCAGACAGGGTTCCCTGGGCCCAGTCTCAGCCC 2312

 101 AGCCACTGATGCTGGATGACCTTGGCCTGACCCTGGTCTGGTCTCAGAAT 150
     ||||||||||||||||||||||||||||||||||||||||||||||||||
2313 AGCCACTGATGCTGGATGACCTTGGCCTGACCCTGGTCTGGTCTCAGAAT 2362

 151 CACTTTTCCCATCTGTAAAATTGAGATGAATTTTGGTGTTGAAAGTTCTT 200
     ||||||||||||||||||||||||||||||||||||||||||||||||||
2363 CACTTTTCCCATCTGTAAAATTGAGATGAATTTTGGTGTTGAAAGTTCTT 2412

 201 CCTGGAGCAGATGTCCTAGAAGGTTTTAGGAATAGTGACAGAGTCAGGCC 250
     ||||||||||||||||||||||||||||||||||||||||||||||||||
2413 CCTGGAGCAGATGTCCTAGAAGGTTTTAGGAATAGTGACAGAGTCAGGCC 2462

 251 ACCCCAAGGGCCATGGGAGCCAGCTGACCTGCTTGACCGAAGGATTTCTG 300
     ||||||||||||||||||||||||||||||||||||||||||||||||||
2463 ACCCCAAGGGCCATGGGAGCCAGCTGACCTGCTTGACCGAAGGATTTCTG 2512

 301 ACAGACTATCTTTGGGGATGTTTTCAAGAAGGGATATAAGTTATTTACTT 350
     ||||||||||||||||||||||||||||||||||||||||||||||||||
2513 ACAGACTATCTTTGGGGATGTTTTCAAGAAGGGATATAAGTTATTTACTT 2562

 351 TGGGCATTTAAAAGAAAATTTCTCTCGGGAATAATTTTAT 390
     |||||||||||||||||||||||||||||||||||||||
2563 TGGGCATTTAAAAGAAAATTTCTCTCGGGAATAATTTTAT 2602
```

**Fig. 7: SEQ ID NO. 2;
amino acid sequence of the human FOAP-13 protein**

Length: 491 aa

```
  1  MAGQGLPLHV ATLLTGLLEC LGFAGVLFGW PSLVFVFKNE DYFKDLCGPD
 51  AGPIGNATGQ ADCKAQDERF SLIFTLGSFM NNFMTFPTGY IFDRFKTTVA
101  RLIAIFFYTT ATLIIAFTSA GSAVLLFLAM PMLTIGGILF LITNLQIGNL
151  FGQHRSTIIT LYNGAFDSSS AVFLIIKLLY EKGISLRASF IFISVCSTWH
201  VARTFLLMPR GHIPYPLPPN YSYGLCPGNG TTKEEKETAE HENRELQSKE
251  FLSAKEETPG AGQKQELRSF WSYAFSRRFA WHLVWLSVIQ LWHYLFIGTL
301  NSLLTNMAGG DMARVSTYTN AFAFTQFGVL CAPWNGLLMD RLKQKYQKEA
351  RKTGSSTLAV ALCSTVPSLA LTSLLCLGFA LCASVPILPL QYLTFILQVI
401  SRSFLYGSNA AFLTLAFPSE HFGKLFGLVM ALSAVVSLLQ FPIFTLIKGS
451  LQNDPFYVNV MFMLAILLTF FHPFLVYREC RTWKESPSAI A
```

**Fig. 8: SEQ ID NO. 3;
nucleotide sequence of the human FOAP-13 cDNA**

Length: 2630 bp

```
   1  CGGACGCGTG GGCGGACGCG TGGGCGGACG CGTGGGCTCT GGGAGTGTGA
  51  AACTGGGAGA GACGGTTAAG CTGGGGACGG TATTCAGAAT TCGAGCGCAG
 101  GAGCTCCGCT TCTCCACCTG CTCCCGGGGA GCTATTGGGA TCCAGAGAAT
 151  CACCCGCTGA TGGTTTTTCC CCAGGCCTGA AACAACCAGA GAGCTACGGG
 201  AAAGGAAGGG CTTGGCTTGC CAGAGGAATT TTCCAAGTGC TCAAACGCCA
 251  GGCTTACGGC GCCTGTGATC CGTCCAGGAG GACAAAGTGG GATTTGAAGA
 301  TCCACTCCAC TTCTGCTCAT GGCGGGCCAG GGCCTGCCCC TGCACGTGGC
 351  CACACTGCTG ACTGGGCTGC TGGAATGCCT GGGCTTTGCT GGCGTCCTCT
 401  TTGGCTGGCC TTCACTAGTG TTTGTCTTCA AGAATGAAGA TTACTTTAAG
 451  GATCTGTGTG GACCAGATGC TGGGCCGATT GGCAATGCCA CAGGGCAGGC
 501  TGACTGCAAA GCCCAGGATG AGAGGTTCTC ACTCATCTTC ACCCTGGGGT
 551  CCTTCATGAA CAACTTCATG ACATTCCCCA CTGGCTACAT CTTTGACCGG
 601  TTCAAGACCA CCGTGGCACG CCTCATAGCC ATATTTTTCT ACACCACCGC
 651  CACACTCATC ATAGCCTTCA CCTCTGCAGG CTCAGCCGTG CTGCTCTTCC
 701  TGGCCATGCC AATGCTCACC ATTGGGGGAA TCCTGTTTCT CATCACCAAC
 751  CTGCAGATTG GGAACCTATT TGGCCAACAC CGTTCGACCA TCATCACTCT
 801  GTACAATGGA GCATTTGACT CTTCCTCGGC AGTCTTCCTT ATTATTAAGC
 851  TTCTTTATGA AAAAGGCATC AGCCTCAGGG CCTCCTTCAT CTTCATCTCT
 901  GTCTGCAGTA CCTGGCATGT AGCACGCACT TTCCTCCTGA TGCCCCGGGG
 951  GCACATCCCA TACCCACTGC CCCCCAACTA CAGCTATGGC CTGTGCCCTG
1001  GGAATGGCAC CACAAAGGAA GAGAAGGAAA CAGCTGAGCA TGAAAACAGG
1051  GAGCTACAGT CAAAGGAGTT CCTTTCAGCG AAGGAAGAGA CCCCAGGGGC
1101  AGGGCAGAAG CAGGAACTCC GCTCCTTCTG GAGCTACGCT TTCTCTCGGC
1151  GCTTTGCCTG GCACCTGGTG TGGCTGTCTG TGATACAGTT GTGGCACTAC
1201  CTCTTCATTG GCACTCTCAA CTCCTTGCTG ACCAACATGG CCGGTGGGGA
1251  CATGGCACGA GTCAGCACCT ACACAAATGC CTTTGCCTTC ACTCAGTTCG
1301  GAGTGCTGTG TGCCCCCTGG AATGGCCTGC TCATGGACCG GCTTAAACAG
1351  AAGTACCAGA AGGAAGCAAG AAAGACAGGT TCCTCCACTT TGGCGGTGGC
1401  CCTCTGCTCG ACGGTGCCTT CGCTGGCCCT GACATCCCTG CTGTGCCTGG
1451  GCTTCGCCCT CTGTGCCTCA GTCCCCATCC TCCCTCTCCA GTACCTCACC
1501  TTCATCCTGC AAGTGATCAG CCGCTCCTTC CTCTATGGGA GCAACGCGGC
1551  CTTCCTCACC CTTGCTTTCC CTTCAGAGCA CTTTGGCAAG CTCTTTGGGC
1601  TGGTGATGGC CTTGTCGGCT GTGGTGTCTC TGCTCCAGTT CCCCATCTTC
1651  ACCCTCATCA AAGGCTCCCT TCAGAATGAC CCATTTTACG TGAATGTGAT
1701  GTTCATGCTT GCCATTCTTC TGACATTCTT CCACCCCTTT CTGGTATATC
1751  GGGAATGCCG TACTTGGAAA GAAAGTCCCT CTGCAATTGC ATAGTTCAGA
1801  AGCCCTCACT TTTCAGCCCC GAGGATGGTT TTGTTCATCT TCCACCACCT
1851  TTGAGGACCT CGTGTCCCAA AAGACTTTGC CTATCCCAGC AAAACACACA
1901  CACACACACA CACACACACA AAATAAAGAC ACACAAGGAC GTCTGCGCAG
1951  CAAGAAAAGA ATCTCAGTTG CCAAGCAGAT TGATATCACA CAGACTCAAA
2001  GCAAAGGCAT GTGGAACTTC TTTATTTCAA AACAGAAGTG TCTCCTTGCA
2051  CTTAGCCTTG GCAGACCCTT GACTCCAGGG GAGATGACCT GGGGGAGGAA
2101  GTGTGTCAAC TATTTCTTTA GGCCTGTTTG GCTCCGAAGC CTATATGTGC
2151  CTGGATCCTC TGCCACGGGT TAAATTTTCA GGTGAAGAGT GAGGTTGTCA
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2201  TGGCCTCAGC TATGCTTCCT GGCTCTCCCT CAAGAGTGCA GCCTTGGCTA
2251  GAGAACTCAC AGCTCTGGGA AAAAGAGGAG CAGACAGGGT TCCCTGGGCC
2301  CAGTCTCAGC CCAGCCACTG ATGCTGGATG ACCTTGGCCT GACCCTGGTC
2351  TGGTCTCAGA ATCACTTTTC CCATCTGTAA AATTGAGATG AATTTTGGTG
2401  TTGAAAGTTC TTCCTGGAGC AGATGTCCTA GAAGGTTTTA GGAATAGTGA
2451  CAGAGTCAGG CCACCCCAAG GGCCATGGGA GCCAGCTGAC CTGCTTGACC
2501  GAAGGATTTC TGACAGACTA TCTTTGGGGA TGTTTTCAAG AAGGGATATA
2551  AGTTATTTAC TTTGGGCATT TAAAAGAAAA TTTCTCTCGG GAATAATTTT
2601  ATAGAAAAAT AAAGCTTCTG TGTCTAAGGC
```

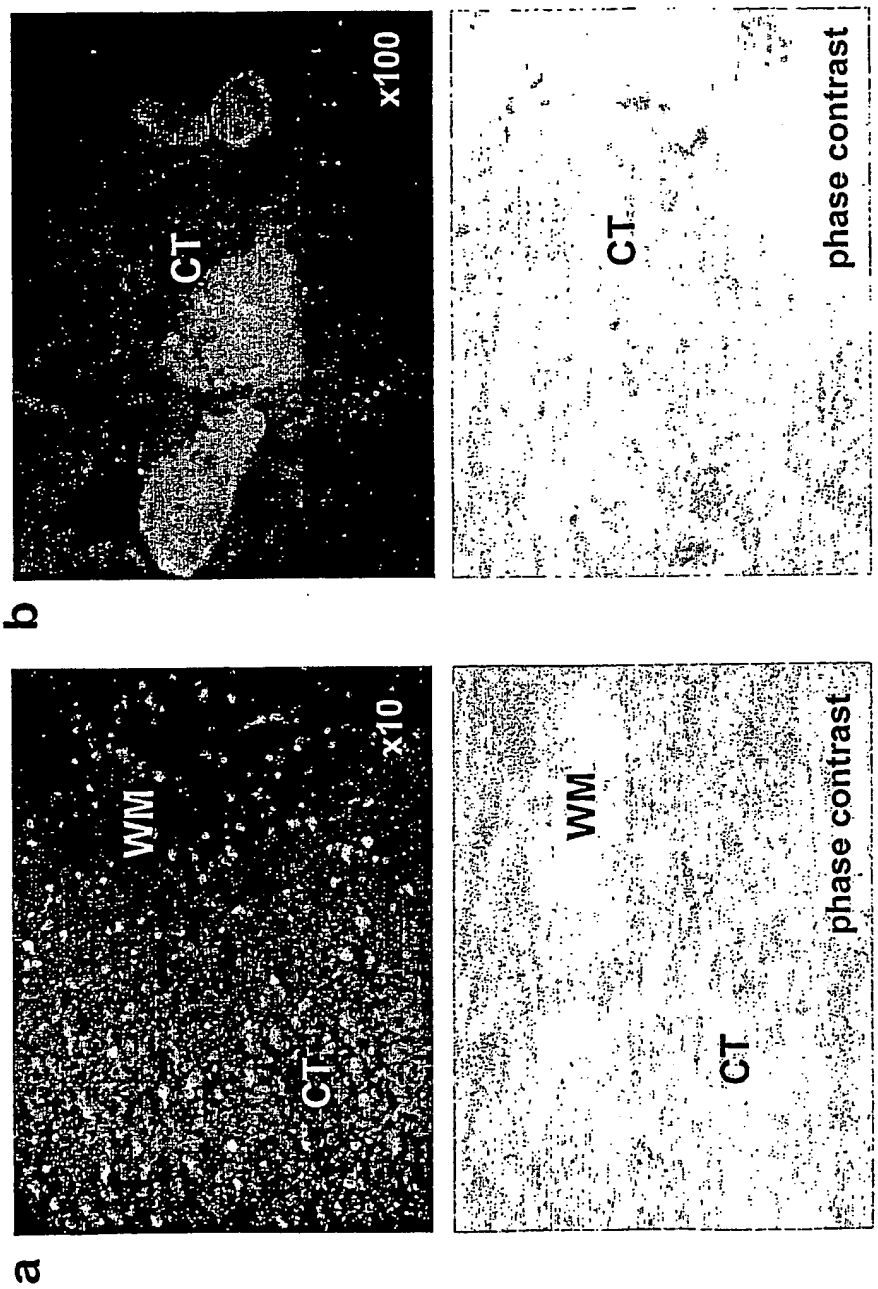

Fig. 9: Images of the human cerebral cortex labeled with anti-FOAP-13 antiserum and with DAPI

Table 1 :

sample	Δ (fold) (temporal / frontal cortex)
control C011	0.89
control C012	0.89
control C014	1.94
control C005	1.19
control C008	1.20
patient P012	1.13
patient P016	1.97
patient P010	1.36
patient P011	1.82
patient P014	1.34
patient P017	2.54
patient P019	1.91